

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: September 24, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, Professional Engineer. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curd v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by October 24, 2004 or received in our office by 5:00 p.m. on October 27, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: September 24, 2004

Permit Number: MO-0123722

Southwest Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Shawnee Bend WWTF Route MM & Grand Point Blvd Sunrise Beach, MO 65079	Lake Region Water and Sewer Company #1 Grand Point Blvd Sunrise Beach, MO 65079
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Unnamed tributary to Forked Hollow Cove (Lake of the Ozarks) Sec. 3, T39N, R16W, Camden County	Domestic, reissuance

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

**MISSOURI CLEAN WATER PERMIT TO DISCHARGE
OPERATING PERMIT**

In compliance with the Missouri Clean Water Law (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 86th Congress) as amended,

Permit No.: MO-0123722

Owner: Lake Region Water and Sewer Company
Owner's Address: #1 Grand Point Blvd., Sunrise Beach, MO 65079

Continuing Authority: Same as above
Address: Same as above

Facility Name: Shawnee Bend Wastewater Treatment Facility
Facility Address: NW Corner of MM & Grand Point Blvd., Sunrise Beach, MO 65079

Legal Description: NE $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 3, T39N, R16W, Camden County

Receiving Stream: Unnamed Tributary to Forked Hollow Cove (U) (Losing)
First Classified Stream and ID: Lake of the Ozarks (L2) (07205)
USGS Basin & Sub-watershed No.: (10290109-080005)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See Page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

FACILITY DESCRIPTION (continued)

Outfalls #001 and #002 - Sludge holding/treatment basin and irrigation system design

Outfall #001 - Sludge treatment/holding basin - SIC #4952

Basin dimensions are 223 x 108 by 6 feet depth.

Operating storage capacity between minimum and maximum operating levels is 365,500 gallons including 1-in-10 year storm water flows.

Outfall #002 - Irrigation system - SIC #4952

Irrigation design flow is based on precipitation.

Irrigation design flow is 325,829 gallons/year including 1-in-10 year storm water flows.

Application rates are: 0.1 inch/hour; 0.25 inch/day; 1.0 inches/week; 12 inches/year.

Irrigation site is a 1.0-acre grassland field with slopes of less than 10 percent.

Irrigation equipment type is sprinklers.

Outfalls #003, #004, #005 and #006 - Eliminated

Outfall #007 - Wastewater Treatment Facility - SIC #4952

Flow equalization/extended aeration/year-round chlorination/sludge treatment and holding basin/sludge will be land applied.

Design population equivalent is 1180.

Design flow is 100,000 gallons per day.

Actual flow is 50,000 gallons per day.

Design sludge production is 21.24 dry tons/year.

DRAFT

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 9	
					PERMIT NUMBER MO-0123722	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The <u>interim</u> effluent limitations shall become effective upon issuance and remain in effect through September 1, 2005. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> - Emergency discharge from the sludge treatment/holding basin (Note 1)						
Flow	MGD	*		*	once/day**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45		once/week**	grab
Total Suspended Solids	mg/L		45		once/week**	grab
pH - Units	SU	***		*	once/week**	grab
Ammonia Nitrogen as N	mg/L	*		*	once/week**	grab
Fecal Coliform	#/100mL	*		*	once/week**	grab
<u>Outfall #002</u> - Land Application Operation (Notes 2 & 3)						
Sludge treatment/holding Basin Freeboard	feet	*			once/week	measured
Irrigation Period	hours	*			daily	total
Volume Irrigated	gallons	*			daily	total
Application Area	acres	*			daily	total
Application Rate	inches/ acre	*			daily	total
Rainfall	inches	*			daily	total
<u>Outfall #002</u> - Irrigated Water (Note 4)						
Total Kjeldahl Nitrogen as N	mg/L	*			once/month****	grab
Total Phosphorus as P	mg/L	*			once/month****	grab
Ammonia Nitrogen as N	mg/L	*			once/month****	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _____.						
<u>Outfall #007</u>						
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅ **	mg/L		15	10	once/month	grab
Total Suspended Solids**	mg/L		20	15	once/month	grab
pH - Units	SU	***		***	once/month	grab
Fecal Coliform	#/100mL	1000		400	once/month	grab
Total Residual Chlorine (Note 5)	mg/L	1.0		1.0	once/month	grab
Ammonia as N	mg/L	*		*	once/month	grab
Temperature	°F	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OF VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I & III STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 4 of 9	
					PERMIT NUMBER MO-0123722	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective September 2, 2005, and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> - Emergency discharge from the sludge treatment/holding basin (Note 1)						
Flow	MGD	*		*	once/day**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	45	once/week**	grab
Total Suspended Solids	mg/L			45	once/week**	grab
pH - Units	SU	***		***	once/week**	grab
Ammonia Nitrogen as N	mg/L	*		*	once/week**	grab
Fecal Coliform	#/100mL			*	once/week**	grab
<u>Outfall #002</u> - Land Application of Irrigation Water (Notes 2 & 3)						
Emergency Storage Basin Freeboard					once/week	measured
Irrigation Period	hours	*			daily	total
Volume Irrigated	acres	*			daily	total
Application Area	acres	*			daily	total
Application Rate	inches/acre	*			daily	total
Rainfall	inches	*			daily	total
<u>Outfall #002</u> - Irrigated Water (Note 4)						
Total Kjeldahl Nitrogen as N	mg/L	*			once/month*****	grab
Total Phosphorus as P	mg/L	*			once/month*****	grab
Ammonia Nitrogen as N	mg/L	*			once/month*****	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _____.						
<u>Outfall #007</u>						
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅ **	mg/L		15	10	once/month	grab
Total Suspended Solids**	mg/L		20	15	once/month	grab
pH - Units	SU	***		***	once/month	grab
Fecal Coliform	#/100mL	1000		400	once/month	grab
Total Residual Chlorine (Note 5)	mg/L	0.019		0.019	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OF VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** Monitor only when discharge occurs. Report as no-discharge when a discharge does not occur during the report.

*** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.

**** Monitor only when irrigation occurs. Report as no-discharge when there is no irrigation during the reporting period.

Note 1 - Emergency discharge only when a rainfall occurs that is in excess of the 1 in 10 year rainfall amount.

Note 2 - Records shall be maintained and summarized into an annual operating report, which shall be submitted by January 28th of each year for the previous calendar year period. The report shall include the following:

- a. Record of maintenance and repairs performed during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
- b. The number of days the emergency storage basin has discharged during the year, the discharge flow, the area of discharge occurred and effluent analysis performed;
- c. A summary of the irrigation operations including freeboard at the start and end of the irrigation season, number of days of irrigation for each month, the number of acres irrigated, the total acres used, crops grown, crop yields per acre, the application rate in inches/acre per day and for the year, the monthly and annual precipitation received at the facility and summary of test results.

Note 3 - Sludge treatment tank basin freeboard shall be reported as water level in feet below the overflow level. See Special Conditions for Wastewater Irrigation System requirements.

Note 4 - Irrigated water shall be sampled at the irrigation pump or wet well.

Note 5 - This permit contains a Total Residual Chlorine (TRC) limit.

- a. If the TRC limit in this permit is 0.01 mg/L or 0.2 mg/L, you must use an analytical method that has a quantification limit of no greater than 0.05 mg/L TRC. For reporting purposes on the discharge monitoring report (DMR), all analytical values below 0.05 mg/L shall be reported as "<quantlim." All analytical values at or above the quantification limit of 0.05 mg/L shall be reported as the measured value. The permittee shall report the quantification limit in the remarks section of the DMR.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

- b. If the TRC limit in this permit is 1.0 mg/L; you must use an analytical method with a quantification limit between 0.2 and 0.5 mg/L. All analytical values below the quantification limit shall be reported as "<quantlim." All analytical values at or above the quantification limit shall be reported as the measured value.

The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average.

The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- c. Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
- d. Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
- e. If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304(b) and (a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different controls which are more stringent than any effluent limitation in the permit.
 - (2) controls any pollutant limit in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 ug/L);
 - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

C. SPECIAL CONDITIONS (continued)

5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful odors or deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity or to have or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances in sufficient amounts to result in toxicity to humans, animals or aquatic life;
 - (5) There shall be no significant health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities

- (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
- (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

8. Annual Report

An annual report is required in addition to the quarterly reporting under Section A of this permit. The annual report shall be submitted by January 28 of each year for the previous growing season from October 1 through September 30 or an alternate 12 month period approved by the Department and listed in the Operation and Maintenance Manual. This report shall be submitted using report forms approved by the Department and shall include a summary of the monitoring and record keeping required by the Special Conditions and Standard Conditions of this permit.

C. SPECIAL CONDITIONS (continued)

9. Wastewater Irrigation System (continued)

- a. Discharge Reporting. Any unauthorized discharge from storage, treatment or land application system shall be reported to the department as soon as possible but always within 24 hours. Discharge is allowed only as described in the Facility Description and Effluent Limitations sections of this permit.
- b. Irrigation Design. Permittee shall operate the land application system in accordance with the design parameters listed in the Facility Description section of this permit.
- c. Emergency Storage Basin Operating Levels - No Large Systems. The minimum and maximum operating water levels for the emergency storage basin shall be clearly marked. The emergency storage basin shall be operated so that the maximum water elevation does not exceed one foot above the normal flow point except due to exceedances of the 1-in. 1-year or 5-year flood storm events. Wastewater shall be land applied in accordance with the design parameters based on soil and weather conditions and permit requirements. The emergency storage basin shall be lowered to the minimum operating level prior to each winter by November 30.
- d. Emergency Spillway. Each emergency storage basin shall have an emergency spillway to protect the structural integrity of earthen structures during operation at near full water levels and in the event of overflow conditions. The spillway shall be at least one foot below top of berm. The department may waive the requirement for overflow structures on small existing basins.
- e. General Irrigation Requirements. The wastewater irrigation system shall be operated so as to provide uniform distribution of irrigated wastewater over the entire irrigation site. A complete ground cover of vegetation shall be maintained on the irrigation site unless the system is approved for row crop irrigation. Wastewater shall be land applied only during daylight hours. The wastewater irrigation system shall be capable of irrigating the annual design flow during an application period of less than 100 days or 800 hours per year.
- f. Saturated/Frozen Conditions. There shall be no irrigation during frozen, snow covered, or saturated soil conditions. There shall be no irrigation on days when more than 0.2 inch of precipitation is received or when there is observation by operator of an imminent or impending rainfall event.
- g. Buffer Zones. There shall be no irrigation within 300 feet of any down gradient pond, lake, sinkhole, losing stream or water supply withdrawal; 100 feet of gaining streams or tributaries; 150 feet of dwelling; or 50 feet of the property line.
- h. Public Access Restrictions. Public access shall not be allowed to irrigation site(s). Fencing and public access restrictions to land application sites shall be in accordance with requirements in 10 CSR 20-8.020(15)(b)(5).
- i. Equipment Checks during Irrigation. The irrigation system and application site shall be visually inspected at least once/hour during wastewater irrigation to check for equipment malfunctions and runoff from the irrigation site.
- j. Operation and Maintenance Manual. The permittee shall develop, maintain and implement an Operation and Maintenance (O&M) Manual that includes all necessary items to ensure the operation and integrity of the waste handling and land application systems. Copies of the O&M Manual and subsequent revisions shall be submitted to the departments' Water Protection Program and Regional Office for review and approval. The O&M Manual shall be reviewed and updated at least every five years.

D. SCHEDULE OF COMPLIANCE

Permittee shall submit engineering plans and specifications for dechlorination of the effluent by February 15, 2005, and obtain a construction permit by April 15, 2005.

Permittee shall complete construction of dechlorination facilities and meet the Final Effluent Limitations for total residual chlorine by September 1, 2005.

In addition, the permittee shall comply with the Consent Judgement and Order of Injunction dated May 11, 2004, in the matter of the State of Missouri vs. Lake Region Water and Sewer Company, Inc.

DRAFT

WATER QUALITY REVIEW SHEET
Determination of Effluent Limits

FACILITY INFORMATION

Facility Name: Shawnee Bend WWTF

NPDES #: MO-0123722

Facility Type/Description: Extended Aeration

8-Digit Huc: 10290109

County: Camden

Legal Description: NE ¼, SW ¼, SW ¼, Sec 3, T39N, R16W

Latitude/Longitude: +03809569/-09240134

Water Quality History And Special Problems: Discharges to a losing stream

OUTFALL CHARACTERISTICS

Outfall	Design Flow (Cfs)	Treatment Type	Receiving Waterbody	Main Contaminant Of Concern
001	0.0	Sludge Treat/ Storage	Forked Hollow Cove	BOD,TSS,Fecal Coliform
002	0.0015	Irrigation System	Forked Hollow Cove	BOD,TSS, Fecal Coliform
007	0.15	Secondary with disinfection	Forked Hollow Cove	BOD,TSS,Fecal Coliform, Total Residual Chlorine

RECEIVING WATERBODY INFORMATION

Waterbody	Class	7q10 (Cfs)	*Designated Uses	Other Characteristics
Forked Hollow Cove	U	0	None	Losing
Lake of the Ozarks	L2		btg,wbc,aql,lww	

*Cool water fishery (clf), cold water fishery (cdf), irrigation (irr), industrial (ind), boating & canoeing (btg), drinking water supply (dws), whole body contact recreation (wbc), protection of warmwater aquatic life and human health (aql), livestock & wildlife watering (lww)

PERMIT LIMITS AND INFORMATION

TMDL Watershed: Yes x No
W.L.A. Study Conducted: Yes No x
Disinfection Required: Yes x No

Disinfection Waiver: Yes No x NA
303d Waterbody: Yes x No NA
Violations: Yes No X

Outfall #001 – Emergency Storage Basin

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
BOD		45	45
TSS		45	45
pH	6.0 & above		
Ammonia as N	Monitor only		
Fecal Coliform	Monitor only		

Outfall #002 – Irrigated Wastewater

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Total Kjeldahl Nitrogen	Monitoring only		
Total Phosphorous	Monitoring only		
Ammonia as N	Monitoring only		

Outfall #003 – Extended aeration plant

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
BOD		15	10
TSS		20	15
pH	6.0 – 9.0		
Fecal Coliform	1000		400
Ammonia as N	Monitor only		
Temperature	Monitor only		

RECEIVING WATER MONITORING REQUIREMENTS – NONE

Site (Name)

Parameter(S)	Sampling Frequency	Sample Type	Location

Derivation and Discussion of Limits

Current permit and 10 CSR 20-7.015. Lake of the Ozarks is on the 303(d) list of impaired waters due to water with low dissolved oxygen being discharged from Truman Lake. At other times, the high flows and turbulence caused from power generation result in a supersaturation of gasses in the water. All three of these conditions may cause injury or death to aquatic life. This discharge will not have any impact on these impairments.

Reviewer: Jerry Croy

Date: April 22, 2004 (Revised 9/17/04)

Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.